

## Tensor product of two basic representations of $U_v(\hat{sl}_e)$

### Abstract

We present a Young diagrammatic description of the last direction of a Lakshmibai-Seshadri path in the Littelmann's path model for the basic representation of  $U_v(\hat{sl}_e)$ . One application is combinatorial description of Demazure crystals for the basic representations of  $U_v(\hat{sl}_e)$ . The other application is a criterion when the bilinear form on a Specht module does not vanish. This gives us a complete set of simple modules of Hecke algebras of type B in a non-recursive manner.